

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method for synchronizing a secondary volume with a primary volume in a continuous data protection system, comprising the steps of:

scanning a region of the primary volume;

comparing the scanned region with a corresponding region of the secondary volume;

storing an identification of the scanned region in a compare delta map when the comparing step results in a discrepancy between the scanned region and the corresponding region; [[and]]

copying data from the primary volume to the secondary volume, using the compare delta map as a guide to locate the data to [[copy]] copy; and

revising the compare delta map by removing any changes made to the primary volume during a scan interval, which is the period of time required to scan the primary volume, the revising step being performed before the copying step.

2. (Original) The method according to claim 1, further comprising the step of:

repeating the scanning, comparing, and storing steps for each region of the primary volume.

3. (Original) The method according to claim 1, further comprising the steps of:

creating a present delta map, covering the changes made to the primary volume from the time of the previous delta map in a delta map chain to the time the method was begun;

creating a point in time (PIT) map based upon the present delta map; and
wherein the creating steps are performed prior to the scanning step.

4. (Original) The method according to claim 3, wherein the comparing step uses the PIT map to determine which region of the secondary volume is compared to the scanned region of the primary volume.

5. (Original) The method according to claim 1, wherein the scanning and comparing steps are optimized by using a dirty region log, wherein only those

regions of the primary volume that are listed in the dirty region log are scanned and compared.

6. (Original) The method according to claim 5, wherein the dirty region log includes only the regions of the primary volume that have been modified but not yet committed to the secondary volume.

7. (Canceled)

8. (Currently amended) The method according to claim [[7]] 1, wherein the revising step includes:

creating a scan delta map, including the changes made to the primary volume during the scan interval; and

subtracting the entries in the scan delta map from the compare delta map.

9. (Currently amended) The method according to claim [[7]] 1, wherein the copying step includes using the revised compare delta map as a guide to locate the data to copy.

10. (Currently amended) The method according to claim [[7]] 1, further comprising the steps of:

creating a host change delta map, including any changes made to the primary volume during a copy interval, which is the period of time required to complete the copying step;

merging the revised compare delta map into the host change delta map, to create a fix-up delta map; and

inserting the fix-up delta map into the end of the delta map chain.

11. (Currently amended) The method according to claim [[7]] 1, further comprising the steps of:

selecting the first delta map prior to the start of the scan interval;

marking the selected delta map as suspect;

adjusting the revised compare delta map by subtracting the changes contained in the selected delta map; and

selecting the previous delta map in the delta map chain and repeating the marking and adjusting steps until the revised compare delta map is empty.

12. - 24. (Canceled)